



Rare Plants of Louisiana



Geocarpon minimum – earth-fruit, tinytim Pink family (Caryophyllaceae)

Rarity Ranks: S1/G2/Fed. listed threatened

Range: AR, LA, MO, TX

Recognition:

- 1) Tiny succulent winter annual, branching from the base with branches ~ 1-2" tall
- 2) Evident from late February to late March in Louisiana
- 3) Plants turn reddish or burgundy with age

Flowering Time: February - March (affected by local weather – several visits during this period are needed to determine peak abundance). If winter conditions are really droughty, earth-fruit may not be evident at all.



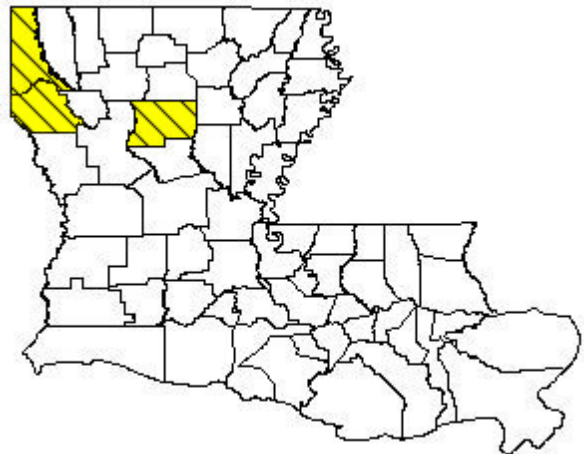
Light Requirement: Full sun

Wetland Status: Does not occur in wetlands

Habitats: Saline prairie around the margins of bare soil “slicks”, or in extreme areas with a thin grass canopy. This species cannot tolerate competition. The rim of a slick is referred to as the cryptogamic lip due to the presence of non-seed “plants” such as blue-green algae, lichens, mosses, etc. Associates include bluets (*Houstonia rosea*), prickly pear cactus (*Opuntia humifusa*), dwarf silverling (*Evolvulus sericeus*), dwarf plantain (*Plantago pusilla*) and rock pink (*Talinum parviflorum*).

Threats:

- 1) Surface damage from vehicular traffic
- 2) Soil erosion
- 3) Chemical and mechanical site prep, tree planting
- 4) Trash dumping
- 5) Rooting by feral hogs
- 6) Conversion to pasture grass (e.g. rye or Bermuda)
- 7) Application of fertilizer – this can increase competition from other plants



Beneficial management practices:

- 1) Do NOT site prep and attempt to plant trees – the habitat will not grow trees anyway
- 2) Communicate importance of not impacting habitat to hunting clubs and others using the land
- 3) Control hog populations through hunting; exclosures would be practical if employed in small areas
- 4) Do NOT convert to pasture by planting exotic grasses such as Bermuda grass
- 5) Do NOT fertilize saline prairies for pasture “improvement” and avoid off-target application when fertilizing large blocks of timber from aircraft



Rare Plants of Louisiana



Robust earth-fruit plant that has turned reddish with age



Well-developed "slick" on a saline prairie, northwest Louisiana



Rock pink, a reliable associate of earth-fruit



Prickly pear cactus is often conspicuous in saline prairies and attests to the droughtiness of the soils

References:

Keith, E. L., J. R. Singhurst, and S. Cook. 2004. *Geocarpon minimum* (Caryophyllaceae) new to Texas. *Sida* 21(2): 1165-1169.

Kral, R. 1983. A report on some rare, threatened, or endangered forest-related vascular plants of the South. Vol. 1. USDA Forest Service, Tech. Publ. R8-TP2: 1-718.

McInnis, N. C., L. M. Smith, and A. B. Pittman. 1993. *Geocarpon minimum* (Caryophyllaceae), new to Louisiana. *Phytologia* 75(2): 159-162.

NatureServe. 2006. NatureServe Explorer: An online encyclopedia of life [web application]. Version 6.1. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: February 5, 2007).

USDA, NRCS. 2007. The PLANTS Database (<http://plants.usda.gov>, 5 February 2007). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.